Anti-Calbindin Antibody

IRS221RB

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	mIHC
Molecular Wt:	Predicted band size: 30 kDa

Description: Calbindin 1 is a protein that in humans is encoded by the CALB1 gene. It belongs to the calbindin family of calcium-binding proteins, along with calretinin (CALB2). The protein encoded by this gene is a member of the calcium-binding protein superfamily that includes calmodulin and troponin C. Originally described as a 27 kDa protein, it is now known to be a 28 kDa protein. It contains four active calcium-binding domains, and has two modified domains that are thought to have lost their calcium binding capability. This protein is thought to buffer entry of calcium upon stimulation of glutamate receptors. Depletion of this protein was noted in patients with Huntington disease.

Immunogen: Synthetic peptide within Human Calbindin aa 51-100 / 261.

Positive control: Mouse kidney medulla tissue.

Subcellular location: Cytosol, Nucleus.

Database links: SwissProt: P12658 Mouse

Recommended Dilutions:

mIHC	1:100

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

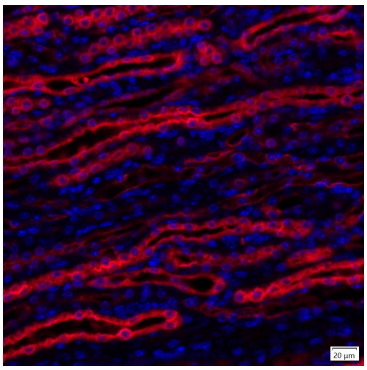

Fig1: mIHC analysis of mouse kidney medulla tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rabbit anti-Calbindin antibody (IRS221RB) at 1/100 dilution. The immunostaining was performed with the IRISKitCmTSA Kit (900808). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Background References

1. Noble JW et al. Exploring Calbindin-IMPase fusion proteins structure and activity. Biochem Biophys Rep. 2022 May
2. Attig J et al. Human endogenous retrovirus onco-exaptation counters cancer cell senescence through calbindin. J Clin Invest. 2023 Jul